U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

Gordon P. Eaton, Director

Reston, VA 20192

For information, contact:

Gerald R. Smith, Commodity Specialist

Telephone: (703) 648-4983, Fax: (703) 648-7757

E-mail: grsmith@usgs.gov

Richelle Gipe (Data), (703) 648-7961

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999 Internet: http://minerals.er.usgs.gov/minerals

LEAD IN FEBRUARY 1997

Domestic mine production, based upon the net quantity recovered in the smelting of concentrate, decreased by about 3% in February. Primary refinery production decreased by 1% and secondary refinery production increased by 2%. Reported consumption decreased by about 3%.

According to Platt's Metals Week published quotations, the average North American producer price and the average London Metal Exchange (LME) cash price declined by about 0.7% and 4.6%, respectively, in February.

National Defense Stockpile cash disposal (sale) of lead in February 1997 was 1,372 metric tons (1,512 short tons). Sale of lead to date in fiscal year 1997 (October 1996 through February 1997) was 7,737 metric tons (8,529 short tons).

The Defense National Stockpile Center (DNSC) recently forwarded the revised Fiscal Year 1997 and the proposed Fiscal Year 1998 Annual Materials Plans (AMP) to the U.S. Congress. According to the AMP, the maximum quantity of lead currently approved for sale in Fiscal Year 1997, under the Defense Authorization Act that went into effect October 1, 1996, remained unchanged at 54,430 metric tons (60,000 short tons). The DNSC proposed that the same quantity of lead be available for sale in Fiscal Year 1998. Should no changes be made by the Congress to the proposed AMP for Fiscal Year 1998, it will go into effect October 1, 1997.

According to a report published in China's Economic Information Daily, production of lead and zinc was projected to decline by 40% by the year 2000. Factors cited as contributing to this expected decline were the significant depletion of reserves at several of China's large, and relatively old, state-owned mines and the decreasing investment in these mines. China reportedly hopes to reverse the trend toward lower mine production by encouraging foreign investment in its mining sector.² Under China's new Mineral Resource Act, which became effective January 1, 1997, foreign companies can now

own equity interests in Chinese projects. Previously they were permitted to own only financial interests. Over the next 5 years the Chinese Government plans further investment in mineral exploration with specific emphasis directed toward the midwestern area of the country.³

In Australia, RTZ-CRA was unable to resolve the Native Title issue regarding ownership of the land associated with the Century zinc-lead mining project in Queensland. Local Aboriginal groups have claimed ownership of this land under Australia's Native Title Act. In an effort to settle the dispute, RTZ-CRA offered to the Native Title claimants a compensation package consisting of employment opportunities, funding for training and business development, interests in pastoral properties, and compensation. Unanimous agreement by the claimants was required in order for RTZ-CRA to obtain full title to the mine site and related pipeline corridor and port facilities. However, only 4 of the 12 Native Title claimants signed the final compensation package offered by RTZ-CRA. Consequently, the company withdrew its compensation offer. As a result, the matter will now go to arbitration, a process in which there is a 6-month time limit.⁴

Indian Lead Pvt Ltd. recently announced plans to build an additional secondary lead refinery at Wada near its existing refinery at Thane, Maharashtra. The Thane plant has a lead production capacity of 25,000 tons per year and the Wadaplant will have a capacity of 20,000 tons per year. Construction at Wada is expected to be completed in two stages, the first by the end of 1997 and the second by the end of 1998. Indian Lead also plans to shift its existing plant from Thane to Wada, with the combined operations of both plants being located in one facility by 1999.⁵

¹Defense National Stockpile Center. News Release. Stockpile Announces Revisions To Fiscal Year 1997 And Fiscal Year 1998 Annual Materials Plans.

DNSC-96-896, February 13, 1997, p. 1.
²Mining Journal, London. Industry In Action; Production--Chinese Output

Falls. V. 328, No. 8416, Feb. 14, 1997, p. 131.

The Northern Miner. Chinese Government Hosts International Mining Exhibition. V. 82, No. 51, Feb. 17, 1997, p. 5.

⁴Metal Bulletin. Century Zinc Goes To Arbitration After Compensation Fails. No. 8154, Feb. 17, 1997, p. 1.

⁵________. Indian Lead To Build New Refinery In Wada. No. 8155, Feb. 20,

1997, p. 12.

$\begin{tabular}{ll} TABLE~1\\ SALIENT~LEAD~STATISTICS~IN~THE~UNITED~STATES~1/\\ \end{tabular}$

(Metric tons)

1996		1997		
Jan Dec. p/	Jan Feb.	Jan.	Feb.	Jan Feb.
418,000	72,100 r/	38,000 r/	36,700	74,700
326,000	65,100	28,800	28,500	57,300
1,010,000	162,000 r/	85,400 r/	87,100	172,000
16,100	2,520 r/	1,390 r/	1,440	2,830
15,000	2,500	1,250	1,250	2,500
1,040,000	167,000 r/	88,000 r/	89,800	178,000
XX	XX	8,460	11,800	XX
XX	XX	50,300 r/	53,900	XX
6,570	635	4,520	NA	4,520 3/
268,000	47,000	22,200	NA	22,200 3/
1,230,000	128,000	102,000	98,800	200,000
454,000	78,500	37,600 r/	36,500	74,100
1,680,000	207,000	139,000 r/	135,000	275,000
59,700	1,590	1,110	NA	1,110 3/
102,000	10,100	8,300	NA	8,300 3/
19,400	1,700	2,080	NA	2,080 3/
3,200	173	145	NA	145 3/
85,300		10,500	NA	10,500 3/
48.83	45.91	48.56	48.24	48.40
	418,000 326,000 1,010,000 16,100 15,000 1,040,000 XX XX XX 6,570 268,000 1,230,000 454,000 1,680,000 59,700 102,000 19,400 3,200 85,300 48.83	418,000 72,100 r/ 326,000 65,100 1,010,000 162,000 r/ 16,100 2,520 r/ 15,000 2,500 1,040,000 167,000 r/ XX XX XX XX XX 6,570 635 268,000 47,000 1,230,000 128,000 454,000 78,500 1,680,000 207,000 59,700 1,590 102,000 10,100 19,400 1,700 3,200 173 85,300 48.83 45.91	418,000 72,100 r/ 38,000 r/ 326,000 65,100 28,800 1,010,000 162,000 r/ 85,400 r/ 16,100 2,520 r/ 1,390 r/ 15,000 2,500 1,250 1,040,000 167,000 r/ 88,000 r/ XX XX XX 8,460 XX XX 50,300 r/ 6,570 635 4,520 268,000 47,000 22,200 1,230,000 128,000 102,000 454,000 78,500 37,600 r/ 1,680,000 207,000 139,000 r/ 59,700 1,590 1,110 102,000 10,100 8,300 19,400 1,700 2,080 3,200 173 145 85,300 10,500	418,000 72,100 r/ 38,000 r/ 36,700 326,000 65,100 28,800 28,500 1,010,000 162,000 r/ 85,400 r/ 87,100 16,100 2,520 r/ 1,390 r/ 1,440 15,000 2,500 1,250 1,250 1,040,000 167,000 r/ 88,000 r/ 89,800 XX XX XX 8,460 11,800 XX XX XX 50,300 r/ 53,900 6,570 635 4,520 NA 1,230,000 47,000 22,200 NA 1,230,000 128,000 102,000 98,800 454,000 78,500 37,600 r/ 36,500 1,680,000 207,000 139,000 r/ 135,000 59,700 1,590 1,110 NA 102,000 10,100 8,300 NA 19,400 1,700 2,080 NA 3,200 173 145 NA 85,300 -

e/ Estimated. p/ Preliminary. r/ Revised. NA Not available. XX Not applicable.

TABLE 2 MONTHLY AVERAGE LEAD PRICES

	North American		Œ	Sterling
	producer price	LI	ME	exchange rate
	cents/lb	\$/metric ton	£/metric ton	dollars/£
1996:				
February	46.59	769.24	500.82	1.535961
November	48.72	716.18	430.83	1.662311
December	48.52	688.38	413.70	1.663933
Year average	48.83	773.87	495.56	1.561616
1997:				
January	48.56	691.89	417.17	1.658514
February	48.24	659.74	405.83	1.625632

Source: Platt's Metals Week.

^{1/} Data are rounded to three significant digits, except prices; may not add to totals shown.

^{2/} Data from American Bureau of Metal Statistics, Inc. (ABMS).

 $^{3/\}operatorname{Includes}$ data for January only; February data not available at time of publication.

 $^{4/\}mbox{ Includes}$ only non-battery scrap data.

$\begin{tabular}{ll} TABLE 3 \\ MINE PRODUCTION OF RECOVERABLE LEAD IN THE UNITED STATES 1/ \\ \end{tabular}$

(Metric tons)

	19	96 p/	1997			
	Year total	Jan Feb. r/	Jan. r/	Feb.	Jan Feb.	
Missouri 2/	387,000	66,900	35,100	33,600	68,800	
Other States 3/	30,800	5,110	2,860	3,060	5,920	
Total	418,000	72,100	38,000	36,700	74,700	
Daily average 4/	1,140	1,200	1,230	1,310	1,270	

p/ Preliminary. r/ Revised.

- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ Alaska and Missouri combined to avoid disclosing company proprietary data.
- 3/ Includes Colorado, Idaho, Montana, and New York.
- 4/ Based on number of days in period without adjustment for Sundays or holidays.

 ${\bf TABLE~4}$ CONSUMPTION OF PURCHASED LEAD-BASE SCRAP IN FEBRUARY 1997 1/

(Metric tons, gross weight)

	Stocks			Stocks
	Jan. 31,	Net		Feb. 28,
Item	1997	receipts	Consumption	1997
Battery-lead	42,200	105,000	106,000	41,300
Soft lead	W	W	W	W
Drosses and residues	1,100	5,420	5,460	1,050
Other 2/	1,300	2,620	2,540	1,370
Total	44,600	114,000	114,000	43,700
Percent change from preceding month		-5.5	-2.2	-2.0

W Withheld to avoid disclosing company proprietary data; included with "Other."

TABLE 5 LEAD, TIN, AND ANTIMONY RECOVERED FROM LEAD-BASE SCRAP IN FEBRUARY 1997 1/

(Metric tons)

	Secondary metal content					
Product recovered	Lead	Tin	Antimony			
Soft and calcium lead	43,200					
Remelt lead	W	W	W			
Antimonial lead	38,600	11	W			
Other 2/	W	W				
Total lead-base	87,100	34	559			

W Withheld to avoid disclosing company proprietary data; included in "Total."

^{1/} Data are rounded to three significant digits; may not add to totals shown.

²/ Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

^{1/} Data are rounded to three significant digits.

^{2/} Includes cable lead, lead-base babbitt, solder, type metals, and other products.

${\bf TABLE~6} \\ {\bf CONSUMPTION~OF~LEAD~IN~THE~UNITED~STATES}~~1/$

(Metric tons, lead content)

	199	6		1997	7
Uses	JanDec. p/	Jan Feb.	Jan.	Feb.	Jan Feb.
Metal products:					
Ammunition-shot and bullets	37,800	8,810	3,960	2,910	6,870
Brass and bronze-billet and ingots	6,060	1,050	549	545	1,090
Cable covering-power and					
communication and calking lead-					
building construction	6,720	943	284 r/	589	874
Casting metals	1,400	212	42	45	87
Pipes, traps, and other extruded					
products	(2/)	82	(2/)	(2/)	(2/)
Sheet lead	13,900	1,630	673	592	1,270
Solder	5,480	906	786 r/	552	1,340
Storage batteries, including oxides	1,140,000	108,000	94,300	93,000	187,000
Terne metal, type metal, and other					
metal products 3/	3,830	1,340	198	158	356
Total metal products	1,210,000	123,000	101,000	98,300	199,000
Other oxides	(4/)	3,440	(4/)	(4/)	(4/)
Miscellaneous uses	13,600	2,200	885 r/	437	1,320
Total reported	1,230,000	128,000	102,000	98,800	200,000
Undistributed consumption e/	454,000	78,500	37,600 r/	36,500	74,100
Grand total	1,680,000	207,000	139,000 r/	135,000	275,000

- e/ Estimated. p/ Preliminary. r/ Revised.
- 1/ Data are rounded to three significant digits; may not add to totals shown.
- 2/ Withheld to avoid disclosing company proprietary data; included with "Sheet lead."
- $3/\ Includes\ lead\ consumed\ in\ foil,\ collapsible\ tubes,\ annealing,\ plating,\ galvanizing,\ and\ fishing\ weights.$
- 4/ Withheld to avoid disclosing company proprietary data; included with "Miscellaneous uses."

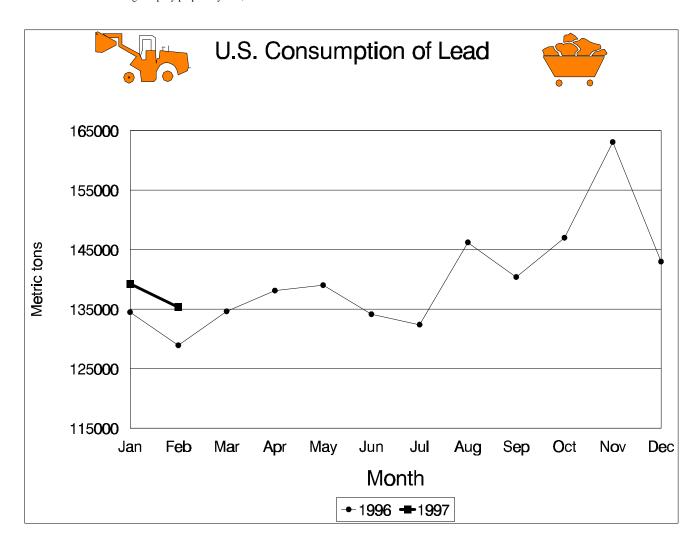


TABLE 7 CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS, AND CONSUMPTION OF LEAD IN FEBRUARY 1997 1/

(Metric tons, lead content)

	Stocks			Stocks
	Jan. 31,	Net		Feb. 28,
Type of material	1997	receipts	Consumption	1997
Soft lead	18,300 r/	53,400	52,200	19,500
Antimonial lead	27,600 r/	29,500	27,600	29,600
Lead alloys	W	19,100	18,600	W
Copper-base scrap	W	442	442	W
Total	50,300 r/	102,000	98,800	53,900

r/ Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."

 $\label{eq:table 8} TABLE~8\\ U.S.~EXPORTS~OF~LEAD,~BY~CLASS~~1/$

(Metric tons)

		1997		
	Nov.	Dec.	Year total	Jan.
Lead content:				
Ore and concentrates	383	15,300	59,700	1,110
Materials excluding scrap	6,760	6,170	102,000	8,300
Ash and residues	3,130	605	19,400	2,080
TEL/TML preparations, based	-			
on lead compounds	106	254	3,200	145
Total	10,400	22,300	184,000	11,600
Gross weight: Scrap 2/	6,110	7,980	85,300	10,500

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

^{1/} Data are rounded to three significant digits; may not add to totals shown.

^{2/} Includes only non-battery scrap data.

 ${\bf TABLE~9} \\ {\bf U.S.~IMPORTS~OF~LEAD~BY~TYPE~OF~MATERIALS~AND~BY~COUNTRY~OF~ORIGIN~~1/2} \\$

(Metric tons, lead content)

		General imports			Import	ts for consumption	on	
		1996		1997	1996			1997
Country of origin	Year total	Jan.	Dec.	Jan.	Year total	Jan.	Dec.	Jan.
Ore, matte, etc.:								
Bolivia	326	7	4	10				
Canada	352,000	31,200	25,000	19,800	4,370	6	148	
Mexico	2,890		559	558	2,080		559	558
Peru	13,400	2,380	832					
Other	133	122		3,960	122	122		3,960
Total	369,000	33,700	26,400	24,300	6,570	128	707	4,520
Base bullion:								
Mexico	5				5			
Total	5				5			
Pigs and bars:								
Belgium	11			10	11			10
Canada	192,000	15,500	16,600	18,400	192,000	15,500	16,900	18,500
Germany	338	63	80	32	338	63	80	32
Mexico	56,900	5,030	4,700	2,610	56,900	5,030	4,700	2,610
Peru	17,100	3,900	700	700	17,100	3,900	700	700
United Arab Emirates	160	10	31	11	160	10	31	11
United Kingdom	19				19			
Other	846		159	345	846		159	345
Total	267,000	24,500	22,300	22,100	268,000	24,500	22,600	22,200
Reclaimed scrap, including								
ash and residues	192	72			192	72		
Grand total	636,000	58,300	48,700	46,500	274,000	24,700	23,300	26,700

^{1/} Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.